

Contents of Volume 20

VOL. 20, NOS. 1–2

30 NOVEMBER 1993

Special Issue: Laboratory Experiments in Physical Oceanography

Part B

<i>Contents</i>	vii
---------------------------	-----

Research Papers

Ocean surface waves

Spatial measurements of short wind waves using a scanning slope sensor P.A. Hwang, D.B. Trizna and J. Wu	1
Bubble size distribution under saltwater and freshwater breaking waves J.W. Cartmill and M.Y. Su	25
Ultra-wideband radar studies of steep crested waves with scanning laser measurements of wave slope profiles D.B. Trizna, J.P. Hansen, P. Hwang and J. Wu	33
A 2-D complex wavelet analysis of an unsteady wind-generated surface wave field G.R. Spedding, F.K. Browand, N.E. Huang and S.R. Long	55

Instabilities/turbulence/shear layers

Blocking and trapping of waves in an inhomogeneous flow S.R. Long, R.J. Lai, N.E. Huang and G.R. Spedding	79
The development of mushroom-like vortices from shear flow instabilities D. Etling, D. Hansen and R. Jürrens	107
Rayleigh–Taylor instability: experiments with image analysis S.B. Dalziel	127
Application of optical techniques to the study of plumes in stratified fluids A.J. Ferrier, D.R. Funk and P.J.W. Roberts	155
Stationary bottom generated velocity fluctuations in one-dimensional open channel flow B. de Jong	185
Guide for Authors	203

VOL. 20, NO. 3

MARCH 1994

Special Issue: Forecasting Weather and Climate Since Richardson, 1922

Introduction

Forecasting Weather and Climate since Richardson, 1922; Symposium held at Utrecht, Netherlands, May 1992 C.J.E. Schuurmans	207
---	-----

Research Papers

Richardson, mathematical modeller	
C.B. Vreugdenhil	211
Validation and diagnosis of atmospheric models	
A. Hollingsworth	227
Long-range weather forecasts through numerical and empirical methods	
H.M. van den Dool	247
Numerical simulation and prediction of climate	
C.J.E. Schuurmans	271

VOL. 20, NO. 4

MAY 1994

Research Papers

Eddy-jet interaction theorems for piecewise constant potential vorticity flows	
G.I. Bell and L.J. Pratt	285
Effects of partial meridional barriers on the Antarctic Circumpolar Current—Wind-driven barotropic model	
A. Ishida	315

Book Reviews

Climatic Change and the Mediterranean: Environmental and Societal Impacts of Climatic Change and Sea-level Rise in the Mediterranean Region	
P.A. Pirazzoli	343
World Atlas of Holocene Sea-level Changes	
N.-A. Mörner	345
El Niño (Historical and Paleoclimatic Aspects of the Southern Oscillation)	
T.J. Crowley	347
<i>Announcement</i>	351
<i>Call for Papers</i>	352
<i>Contents of Volume 20</i>	353